CONTINUOUSLY VARIABLE HEADLAMP CONTROL ABSTRACT OF THE DISCLOSURE

A system for automatically controlling continuously variable headlamps on a controlled vehicle includes an imaging system capable of determining lateral and elevational locations of headlamps from oncoming vehicles and tail lamps from leading vehicles. The system also includes a control unit that can acquire an image from in front of the controlled vehicle. The image covers a glare area including points at which drivers of oncoming and leading vehicles would perceive the headlamps to cause excessive glare. The image is processed to determine if at least one oncoming or leading vehicle is within the glare area. If at least one vehicle is within the glare area, the headlamp illumination range is reduced. Otherwise, the illumination range is set to full illumination range.